

LEARNING MATTERS

THE IMPROVEMENT RATINGS

The 2010 goal states, "By 2010, SC's student achievement will be ranked in the top half of the states nationally. To achieve the goal, we must become one of the five fastest improving systems in the country."

The 2001 Absolute and Improvement Ratings for SC's schools and districts demonstrate wide variations in school and district performance. We saw high Absolute Performance Ratings for schools that historically have been considered our best; we saw winners of the Blue Ribbon and Palmetto's Finest awards programs with high Absolute Performance Ratings; and, of greatest encouragement, we saw high ratings among schools most challenged by the concentrated disadvantages of poverty.

Yes, the data suggest that higher concentrations of economically advantaged students are related positively to higher absolute per-

formance indices. But there are enough counter examples to the linkage of wealth and achievement to suggest that our students, regardless of personal circumstance, can compete with students across the nation. The Improvement Ratings yielded mixed results. There was not a significant statistical relationship between student wealth and the improvement indices. Yet Improvement Ratings were lower than hoped. Why were we disappointed in the Improvement Ratings? Were the lower than expected ratings a function of the way the rating is calculated or a pattern in student achievement?

This issue of *Learning Matters* explores those questions and the process of deliberate study the EOC is undertaking.¹

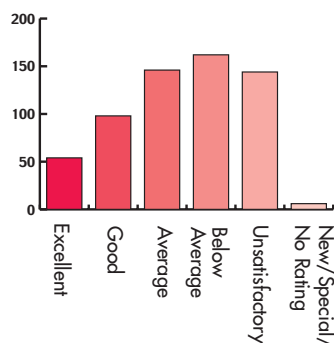
¹NOTE: For information regarding primary schools, career & technology centers, districts or special schools, please refer to the 2002 - 03 Accountability Manual or www.sceoc.org.

Table One

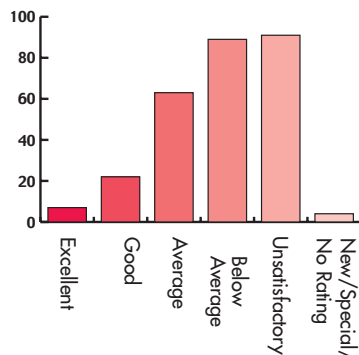


Frequencies of School Report Card Improvement Ratings
2000-2001 School Year

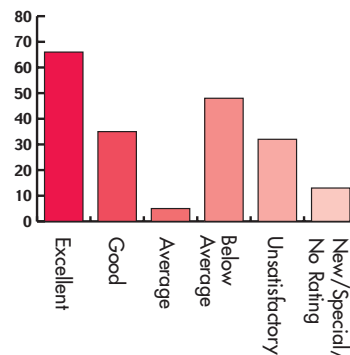
Elementary Schools



Middle Schools



High Schools




How well did schools perform?

Improvement Ratings for schools were reported for the first time in December 2001. The summary tables displaying the ratings by school level are below.

What observations can be made about the ratings?

First, the mean Improvement Index for elementary and middle schools in 2001 was 0.014, which rounds to 0.0. A gain of 0.0 corresponds to a Below Average Improvement Rating. By comparison, the mean Improvement Index in the simulation of 1999-2000 data was 0.2, which corresponds to an Average Improvement Rating.

Second, the ratings demonstrate the shift among categories of student performance. While there was an increase in the percentage of students scoring Basic and Above, there were, at many grade levels, declines in the percentage of students scoring Proficient or Advanced. Analyses of cohorts of students over time indicate similar gains in 1999-2000 and flat growth in 2000-2001. The cohort comparisons for grades 3 and 8 demonstrate the differences. The comparisons for Grades 4-7 can be found on the EOC website, www.sceoc.org, under "Report Card Issues and Recommendations."


Table Two 
Comparison of Cohort Performance 2000-2001
Grades 3-4 and 7-8

2000-2001	ENGLISH LANGUAGE ARTS				
	# Tested	% BB	% BA	% PF	% AD
Grade 4 2001	50463	19.5	43.0	35.4	2.1
Grade 3 2001	51766	25.6	34.4	36.0	4.0
Difference	-1303	-6.1	8.6	-0.6	-1.9

MATH				
# Tested	% BB	% BA	% PF	% AD
51332	32.7	41.4	16.3	9.6
52112	31.0	43.5	16.1	9.4
-780	1.7	-2.1	0.2	0.2

Grade 8 2001	47205	30.7	45.9	20.9	2.5
Grade 7 2001	49439	31.9	40.8	23.4	4.0
Difference	-2234	-1.2	5.1	-2.5	-1.5

47366	37.1	44.6	13.0	5.3	
49785	40.9	37.4	13.0	8.8	
-2419	-3.8	7.2	0.0	-3.5	

Table Three 
Comparison of Cohort Performance 1999-2000
Grades 3-4 and 7-8

2000-2001	ENGLISH LANGUAGE ARTS				
	# Tested	% BB	% BA	% PF	% AD
Grade 4 2000	47515	28.0	35.1	33.0	3.9
Grade 3 1999	47287	34.9	37.1	26.1	1.9
Difference	228	-6.9	-2.0	6.9	2.0

MATH				
# Tested	% BB	% BA	% PF	% AD
47932	38.4	38.0	15.6	8.0
47492	43.7	38.4	12.6	5.3
440	-5.3	-0.4	3.0	2.7

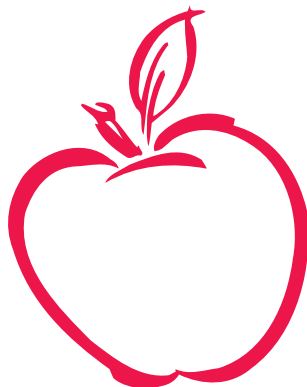
Grade 8 2000	48486	35.1	41.3	20.0	3.5
Grade 7 1999	50373	37.3	39.1	20.5	3.1
Difference	-1887	-2.2	2.2	-0.5	0.4

48838	38.0	42.3	13.1	6.6	
50282	48.4	36.0	11.1	4.6	
-1444	-10.4	6.3	2.0	2.0	

What principles underlie the calculation of the Improvement Rating?

The Improvement Rating and the Improvement index reflect several desired features of an accountability system:

- Improvement is measured in terms of growth of individual students over time, so that individual student improvement is recognized, regardless of how low the student's initial achievement may have been;
- Improvement is measured in terms of the increases in achievement of students scoring initially at all levels of performance (Below Basic 1, Below Basic 2, Basic, Proficient, Advanced), such that, over time, students are expected to score at higher performance levels;
- The Improvement index reflects the increases in school performance which are built into the accountability system, so schools have to achieve at higher levels from 2001 to 2010 to maintain the same Absolute Rating;
- The Improvement Rating is adjusted upward to recognize sustained high achievement (schools that maintain Excellent Absolute Ratings over time) and to recognize exceptional achievement gains on the part of student demographic groups that historically have underachieved in SC schools.



Which students are included in the ratings?

Grades 3-8

- Students enrolled in the school by the 45th day and at the time of testing, who can be matched to the previous year and who have PACT scores for both years even if they attended a different school during the previous year;
- Students with disabilities with accommodated or modified assessments are included. Their scores are applied in the same manner as the performance of students taking the assessments in the standard forms;
- Students taking alternate assessments are included only in the district's rating and only beginning in 2004;
- English Language Learners (students with limited English proficiency) are tested in accordance with federal guidelines; therefore, students excused from testing by federal rules are excluded from the number of students eligible for testing.

High Schools

- Students enrolled in the school by the 45th day and at the time of testing;
- Students enrolled in the senior class (LIFE scholarships);
- Students with disabilities with accommodated or modified assessments are included. Their scores are applied in the same manner as the performance of students taking the Exit Exam in its standard form;
- English Language Learners (students with limited English proficiency) are tested in accordance with federal guidelines; therefore, students excused for testing by federal rules are excluded for the number of students eligible for testing.

How are Improvement Ratings calculated for elementary and middle schools?

The Improvement Ratings are calculated using the following mathematical formula that results in an index:

Step 1: Calculate an index in the same manner as calculating an Absolute Rating index using PACT performance of all students qualifying for inclusion in the Improvement Rating for the current year (year on which the report card is based).

Step 2: Using these same students, calculate a second index in the same manner as calculating an Absolute Rating index using their PACT performance for the year prior.

Step 3: Subtract the prior year's index from the current year's index yielding a difference.

Step 4: Assign the rating term for the difference: Excellent: 0.4 or greater; Good: 0.3; Average: 0.1-0.2; Below Average: 0; and Unsatisfactory: -0.1 or less.

Example:

Absolute Rating Index for current school year: 3.3
Absolute Rating Index for the prior school year: 3.6

Difference: - 0.3

Improvement Rating: Unsatisfactory

How are the Improvement Ratings calculated for high schools?

The Improvement Ratings are calculated using a mathematical formula that results in an index. The index is calculated by subtracting the school's Absolute Rating index for the prior year from the school's current year's Absolute Rating index. The difference determines the rating in accordance with the table below.

Table Four 
Improvement Rating Indices

Rating	Weighted Improvement Index
Excellent	0.4 or greater
Good	0.3
Average	0.1-0.2
Below Average	0.0
Unsatisfactory	-0.1 or less



Can the rating be adjusted for special achievements?

A school's Improvement Rating is adjusted upwards one rating level, for example from Average to Good or from Good to Excellent, if it has experienced exceptional achievement gains among students belonging to demographic groups which historically have underachieved in SC schools. The gain for the identified groups must be higher than the achievement gain for all students statewide. If a school accomplishes this achievement, a notice is printed on the front page of its report card immediately below the Improvement Rating.

Schools maintaining an Excellent Absolute Rating for two consecutive years receive a Good Improvement Rating, and if the school's improvement index for all students is a positive number (e.g., greater than zero), the school's Improvement Rating will be elevated to Excellent.

Schools achieving an Absolute Rating index of 4.8 or higher for two consecutive years will be awarded an Excellent Improvement Rating.

What is the level of improvement required for a school with an Average Absolute Performance Rating in 2001 to continue an Average Rating through 2009?

Beginning in 2004, the range of indices for each Absolute Performance Rating category increases. For example, the indices for an Average Absolute Performance Rating in 2001 are 2.6 through 2.9. In 2009, the indices for an Average Absolute Performance Rating are 3.2 through 3.5 (see table below).

A school that was at the state average in 2001 has an index of 2.75. To meet the minimum index for an Average Absolute Performance Rating in 2009, the school would need to increase its index to 3.15. That is a 0.4 gain, equivalent to 0.05 per year if spread over 8 years — and the gain that yields an Average Improvement Rating. In simple terms, a school should target a net gain in 5 percent of test scores each year.

What Improvement Rating issues are being studied by the EOC?

The EOC is committed to continuous improvement of the accountability system, including the calculation of the ratings. At the March EOC meeting, the committee committed to study several aspects of the Improvement Ratings including the following:

- What is the pattern of changes among student performance categories: are students becoming more competent relative to the demands of the curriculum at each grade?
- Are there alternative breakdowns of the student performance categories that can be linked to more levels of student competence and school achievement?
- Can the scores among different grade levels of PACT be vertically equated?
- Could multi-year analyses of change in student performance give greater stability in the ratings calculations?

With the passage of the No Child Left Behind federal legislation, another critical question is added for EOC review:

- What improvement is required for SC schools to make adequate yearly progress?



Table Five
Absolute Rating Indices Through 2010

Ratings: Year	Excellent index range	Good index range	Average index range	Below Average index range	Unsatisfactory index range
2001	3.4 and above	3.0-3.3	2.6-2.9	2.2-2.5	Below 2.2
2002	3.4 and above	3.0-3.3	2.6-2.9	2.2-2.5	Below 2.2
2003	3.4 and above	3.0-3.3	2.6-2.9	2.2-2.5	Below 2.2
2004	3.5 and above	3.1-3.4	2.7-3.0	2.3-2.6	Below 2.3
2005	3.6 and above	3.2-3.5	2.8-3.1	2.4-2.7	Below 2.4
2006	3.7 and above	3.3-3.6	2.9-3.2	2.5-2.8	Below 2.5
2007	3.8 and above	3.4-3.7	3.0-3.3	2.6-2.9	Below 2.6
2008	3.9 and above	3.5-3.8	3.1-3.4	2.7-3.0	Below 2.7
2009-10	4.0 and above	3.6-3.9	3.2-3.5	2.8-3.1	Below 2.8

Where can I learn more about the calculation of the Improvement Rating?

Printed/Website Information:

www.sceoc.org

2002-03 EOC Accountability Manual

March 2002 EOC Report Card Issues and Recommendations

March 2002 EOC Annual Report to the General Assembly

Ratings Video:

Technical Documentation on Calculating the Ratings
(to be sent to schools in early fall for use with
teachers and principals)



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